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Marlene H. Dortch, Esq.
Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

RE: Wireless Telecommunications Bureau and Office of Engineering and Technology Seek Comment on NextNav Petition for Rulemaking – WT Docket No. 24-240; RM-11989

Dear Ms. Dortch:

Scintec Corporation is a Colorado manufacturer of advanced meteorological instruments including radar wind profiler systems. The technology used within Scintec radar wind profilers was developed by the National Oceanic and Atmospheric Administration (NOAA). Scintec is the national and world leader in this field.

Scintec Corporation expresses its strong opposition to NextNav's proposed changes of the current allocations within the 902-928 MHz frequency band.

Scintec radar wind profilers are increasingly used by military and non-military federal agencies as well as various industries to provide high-quality upper-air wind data which are critical for aviation safety, space-launch support, short-term weather prediction, and related emergency response.

In the United States, the 902-928 MHz frequency band is the only band available for radar wind profilers having a range resolution fine enough for many safety and mission critical applications. The related Scintec radar wind profilers operate at 915 MHz central frequency.

Based on the details set forth in NextNav's petition, the proposed deployment of a terrestrial radio network for navigation in conjunction with the intended 5G broadband co-use will result in significant interferences with radar wind profilers in the network's proposed nationwide coverage area. This will significantly affect the measurement capabilities of radar wind profilers with negative impact on future aviation safety, successful space operations, heavy weather forecast, and other technological advancements which protect the society from ever increasing environmental challenges.

There will be no viable way to technically mitigate the interferences by modifying the radar wind profilers. The bandwidth requirements of radar wind profilers are physically linked to their range resolution. Since radar wind profilers must detect weak atmospheric echo signals against the noise background, they are very sensitive to external RF interference signals with frequencies or out-of-

Scintec is an ISO9001 certified quality company band frequency components within their necessary receiver ranges. Filter techniques are not suited to effectively suppress interferences related to the characteristics of 5G broadband spectrum use.

It is also noted that no alternative remote-sensing technology can replace radar wind profilers in all occurring weather conditions, including conditions of poor visibility or heavy precipitation.

For the reasons stated above, Scintec Corporation urges the FCC to deny NextNav’s petition.

Sincerely,

Bettina Schrauf
Director and Vice President Scintec Corporation